UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 4 Science and Ecosystem Support Division
980 College Station Road, Athens, Georgia 30605-2700
D.A.R.T. Id: 12-0562
Project: 12-0563, Yellow Bluff Dust Study - Reported by Mike Wasko

July 31, 2012

4SESD-ASB

MEMORANDUM

SUBJECT: FINAL Analytical Report
Project: 12-0563, Yellow Bluff Dust Study
Air Quality Management

FROM: Mike Wasko
ASB Inorganic Chemistry Section Chief

THRU: Gary Bennett, Chief
Analytical Support Branch

TO: Michael Crowe

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at www.epa.gov/region4/sesd/asbsop. Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and may have been qualified if the applicable quality control criteria were not met. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:	Method Used:
Classical/Nutrient Analyses (CNA)	
Ammonia/TKN	EPA 350.1
Classical/Nutrients	EPA 300.0

Sample Disposal Policy

Because of the laboratory's limited space for long term sample storage, our policy is to dispose of samples on a periodic schedule. Please note that within 60 days of this memo, the original samples and all sample extracts and/or sample digestates will be disposed of in accordance with applicable regulations. The 60-day sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time if you have a special project need. If you wish for the laboratory to hold samples beyond the 60-day period, please contact our Sample Control Coordinator, Debbie Colquitt, by e-mail at Colquitt.Debbie@epa.gov, and provide a reason for holding samples beyond 60 days

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SAMPLES INCLUDED IN THIS REPORT

Project: 12-0563, Yellow Bluff Dust Study

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
MC1	E122803-01	Bottle Blank	7/9/12 08:00	7/9/12 11:36
MC2	E122803-02	Bottle Blank	7/9/12 08:00	7/9/12 11:36
MC3	E122803-03	Bottle Blank	7/9/12 08:00	7/9/12 11:36
MC4	E122803-04	Bottle Blank	7/9/12 08:00	7/9/12 11:36

DATA QUALIFIER DEFINITIONS

U	The analyte was not detected at or above the reporting limit.

ACRONYMS AND ABBREVIATIONS

CAS	Chemical Abstracts Service Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.
MDL	Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
MRL	Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
TIC	Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

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Classical/Nutrient Analyses

Project: 12-0563, Yellow Bluff Dust Study

Sample ID: MC1 **Lab ID:** E122803-01

Station ID: **Matrix:** Bottle Blank

Date Collected: 7/9/12 8:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
7664-41-7	Ammonia as N	0.010	U	mg/Bottle	0.010	7/20/12 13:23	7/24/12 16:03	EPA 350.1
16887-00-6	Chloride	20	U	ug/Bottle	20	7/24/12 15:12	7/24/12 23:06	EPA 300.0
14808-79-8	Sulfate as SO4	20	U	ug/Bottle	20	7/24/12 15:12	7/24/12 15:12	EPA 300.0

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Classical/Nutrient Analyses

Project: 12-0563, Yellow Bluff Dust Study

Sample ID: MC2 **Lab ID:** E122803-02

Station ID: **Matrix:** Bottle Blank

Date Collected: 7/9/12 8:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
7664-41-7	Ammonia as N	0.010	U	mg/Bottle	0.010	7/20/12 13:23	7/24/12 16:03	EPA 350.1
16887-00-6	Chloride	20	U	ug/Bottle	20	7/24/12 15:12	7/24/12 23:27	EPA 300.0
14808-79-8	Sulfate as SO4	20	U	ug/Bottle	20	7/24/12 15:12	7/24/12 15:12	EPA 300.0

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Classical/Nutrient Analyses

Project: 12-0563, Yellow Bluff Dust Study

Sample ID: MC3 **Lab ID:** E122803-03

Station ID: **Matrix:** Bottle Blank

Date Collected: 7/9/12 8:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
7664-41-7	Ammonia as N	0.010	U	mg/Bottle	0.010	7/20/12 13:23	7/24/12 16:03	EPA 350.1
16887-00-6	Chloride	20	U	ug/Bottle	20	7/24/12 15:12	7/24/12 23:49	EPA 300.0
14808-79-8	Sulfate as SO4	20	U	ug/Bottle	20	7/24/12 15:12	7/24/12 15:12	EPA 300.0

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Classical/Nutrient Analyses

Project: 12-0563, Yellow Bluff Dust Study

Sample ID: MC4 **Lab ID:** E122803-04

Station ID: **Matrix:** Bottle Blank

Date Collected: 7/9/12 8:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
7664-41-7	Ammonia as N	0.010	U	mg/Bottle	0.010	7/20/12 13:23	7/24/12 16:03	EPA 350.1
16887-00-6	Chloride	20	U	ug/Bottle	20	7/24/12 15:12	7/25/12 0:10	EPA 300.0
14808-79-8	Sulfate as SO4	20	U	ug/Bottle	20	7/24/12 15:12	7/25/12 0:10	EPA 300.0

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Classical/Nutrient Analyses (CNA) - Quality Control
US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1207083 - C 350.1 Ammonia										
Blank (1207083-BLK1)				Prepared: 07/20/12 Analyzed: 07/24/12						
EPA 350.1										
Ammonia as N	U	0.010	mg/Bottle							U
LCS (1207083-BS1)				Prepared: 07/20/12 Analyzed: 07/24/12						
EPA 350.1										
Ammonia as N	0.00095300	0.000050	mg/Bottle	0.0010000		95.3	90-110			
LCS Dup (1207083-BSD1)				Prepared: 07/20/12 Analyzed: 07/24/12						
EPA 350.1										
Ammonia as N	0.00095700	0.000050	mg/Bottle	0.0010000		95.7	90-110	0.419	10	
MRL Verification (1207083-PS1)				Prepared: 07/20/12 Analyzed: 07/24/12						
EPA 350.1										
Ammonia as N	0.000048000	0.000050	mg/Bottle	0.000050000		96.0	70-130			MRL-2, U

Notes and Definitions for QC Samples

U	The analyte was not detected at or above the reporting limit.
MRL-2	MRL verification for Non-Potable Water matrix